

LA-UR-19-21787

Approved for public release; distribution is unlimited.

Title: Unlisted Equipment -- The do's and don'ts

Author(s): Esch, Ernst Ingo

Intended for: ALDGS safety presentation

Issued: 2019-02-28

Disclaimer:

Los Alamos National Laboratory, an affirmative action/equal opportunity employer, is operated by Triad National Security, LLC for the National Nuclear Security Administration of U.S. Department of Energy under contract 89233218CNA000001. By approving this article, the publisher recognizes that the U.S. Government retains nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or to allow others to do so, for U.S. Government purposes. Los Alamos National Laboratory requests that the publisher identify this article as work performed under the auspices of the U.S. Department of Energy. Los Alamos National Laboratory strongly supports academic freedom and a researcher's right to publish; as an institution, however, the Laboratory does not endorse the viewpoint of a publication or guarantee its technical correctness.

Unlisted Equipment

The Do's and Don'ts

Ernst Esch
Los Alamos National Laboratory

February 26, 2019

Questions about "Listed" Equipment

- What is listed equipment?
- Do I need listed equipment?
- What if I don't know?
- What about my old antique?
- Procurement?
- what if I really need this unlisted item?

What is "listed" Equipment?

- When we say "listed" we mean NRTL certified equipment.
- NRTL - Nationally Recognized Testing Laboratory. An independent laboratory recognized by the Occupational Safety and Health Administration (OSHA) to test products to applicable product safety standards.
- OSHA requires NRTL listed equipment to be used in commercial settings.

Do I need listed equipment? – **YES!**

Governing policy P101-13:

5.1.6 Purchasing and Procurement Requirements for Nationally Recognized Testing Laboratory (NRTL)-Listed Equipment

NRTL-listed equipment must be specified, purchased and used if available. For new or replacement equipment, an NRTL-listed product must be purchased instead of an unlisted product if both exist. All NRTL-listed equipment must be used in accordance with any instructions required by the manufacturer included in the listing or labeling for its intended purpose. Otherwise, the equipment must be treated as unlisted and must be approved per the requirements in this document.

5.1.1 Summary

A. All electrical equipment that contains or produces hazardous electrical energy (classes X.2 and above) used at LANL must be listed by a Nationally Recognized Testing Laboratory (NRTL) or approved by an Electrical Safety Officer (ESO) before use. NRTL listed equipment that has been modified or used outside of its intended use (as determined by the listing) must also be approved by an ESO before use.

UNCLASSIFIED

How do I know if equipment is NRTL listed?

Underwriters
Laboratories (UL)



Canadian
Standards
Association (CSA)



Factory Mutual
(FM)



APPROVED



APPROVED

Intertek Testing
Services (ETL)



TUV America
(TUVAM)



User Notes

- NRTL = Nationally Recognized Testing Laboratory
- listed from most common to least
- The NRTL mark is often found near the power cord where it enters the equipment
- If it plugs into the wall at home or in the office, it should have one of these marks, otherwise, do not use it
- Teach your family and friends to look for these marks before purchase
- CE is NOT an NRTL mark



Applied Research
Laboratories (ARL)



Communication
Certification Lab (CCL)



Electrical Reliability
Services (ETI)



UNCLASSIFIED

How do I know if equipment is NRTL listed?

TUV Rheinland of
North America (TUV)



National Technical
Systems



Entela



Southwest Research
Institute (SWRI)



MET Laboratories,
Inc. (MET)



SGW U.S. Testing
Company (USTC)



NSF International
(NSF)



For more information go to:

<http://www.osha.gov/dts/otpc/nrtl/index.html>

or

<http://www.lanl.gov/safety/electrical/>

or

contact your electrical safety matter expert

Curtis-Straus LLC
(CSL)



May 12, 2008

I really really need it !!!

- Absolutely need the item !
- Can't find it anywhere as listed item.
- What am I going to do?
- Take a deep breath and call your ESO
- The ESO will examine the item and if possible approve your equipment.



Fig. 5-1. Current LANL Equipment Approval Label



Fig. 5-2. Other variations of the LANL Equipment Approval Label

Tips And Tricks

- Number one helpful thing: Communicate with your ESO.
- Involve the ESO BEFORE you purchase.
 - The ESO will help you with the right product.
 - The ESO will advise you on work safety documentations.
- Know your ESO got to esc.lanl.gov for a list of ESOs.
- When in doubt call the subject matter expert or the person who knows the SME's phone number.